

ERGONOMICS: YARC

Preventive Measures and Controls

Materials Handling

- Minimize repetitive actions by rotating tasks as much as possible.
- Reduce the size and weight of the load to make handling easier.
- Be mindful and protect against sharp edges. Use gloves, coveralls and safety shoes.
- Lighting, temperature and humidity can all contribute to the likelihood of an accident occurring. Evaluate the environmental conditions and postpone the work until conditions improve.

Awkward Positions

- Be aware of your posture. Good posture maintains the natural curve of your spine and includes relaxed shoulders that are held slightly back and level, ears in line with your shoulders, chin tucked slightly inward and pelvis shifted forward to allow your hips to align with your ankles.
- Sit close to your work and keep frequently used materials within reach.
- Maintain neutral wrist/arm postures as much as possible.
- Avoid twisting and bending motions. These types of movements can put pressure on your spine's discs.
- Use both hands instead of one to lift or complete tasks.
- Respect your discomfort or pain. Change positions, stretch to ease stiff muscles, take a short break or change tasks.

Handling Bulky Sacks

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Placing or Depositing the Load

- Keep your body in a neutral posture to help avoid injury while placing or depositing a load.
- Keep a wide stance with one foot in front of one another.
- Keep the load close to your body.
- Bend at your knees when starting to place the load.
- Keep the object tilted when close to the ground to allow for easy finger removal from underneath the box or load.
- Avoid sudden movement and jerking motions at all times.
- Whenever possible leave enough space to allow the equipment to slide in easily. Trying to fit a piece of equipment into a tight space can lead to hand injuries.

Loading and Unloading Equipment

- Only move equipment that is of a weight that you can handle safely.
- Tie off or remove components or parts that are loose or may become loose.
- Large equipment should be rolled off using ramps or trailer gates.
- If lowered by hand, be sure you can handle the load and stay clear of the load at all times.
- Small equipment should be moved in crates, boxes or strong bags such as canvas.
- Be careful of sharp or rough working parts of all equipment.
- Lift and place equipment off of racks and cages above knee height and below chest height.

Tools and Equipment

There are many different mechanical aids that can be used to assist with heavy material moving. Wheeled equipment aids will help minimize the force needed to move a heavy object. The amount of force required to move loads with wheeled equipment depends on a number of factors listed below:

- The weight and shape of the load.
- The type and condition of floor surfaces. A carpeted floor will require more force than a smooth surfaced hard floor like cement.
- The type, size and wheel construction will make a difference in how much force is required to push or pull the cart.
- Straps can be used to keep the load from shifting from one side to the other. Properly installed straps can prevent injury and property damage.
- Know the limitations of this equipment and call Environmental Health and Safety for assistance with purchasing new equipment or tools.

Pushing and Pulling

- Always use two hands when pushing or pulling. Do not pull with one arm extended behind your body.
- Ensure that good visibility is possible without awkward motions such as twisting or stretching. If your vision is blocked when pushing a cart from the back, move to the front corner of the cart to push.
- Keep your upper arms against your rib cage with your elbows in. Keep your hands at or slightly above waist level. Keep your feet shoulder width apart.
- Bend your knees slightly and move the load by shifting your weight. For example, with one leg in front of the other, bend your knees and move the load by shifting your weight from your back leg to your front leg.
- It is better to push than pull a load. Pushing generally takes less effort than pulling because your body weight is used to assist the exertion. Pulling a load often causes carts to run into the shins or ankles.

Moving Cages and Transporting Carts

- Know your route prior to beginning the lift and move of the load.
- Ensure that your path and end location is free of obstacles and debris.
- Set barriers to prevent people from coming close to or beneath supported or moving loads.
- Move objects when traffic in these areas are at a minimum.
- If walking long distances with heavy loads, take breaks to allow your body time to rest.
- Avoid sudden, quick movements.
- Never move a cage or cart that is too heavy.
- If a cage or cart is broken or does not move easily, it should be taken out of service.

Cage Changing and Washing

- Try to keep the load in the safe lifting zone above your knees and below your shoulders. If you need to reach higher, use a stool or step ladder to help keep a neutral posture.
- Use a cart or adjustable table so that workers are not lifting directly off of the floor,
- Avoid bending and twisting motions.

Writing on Cages

- Keep your wrist straight.
- Remove the card from the cage and write on a flat surface.

Cleaning

- Move your feet from side to side. This will help avoid extreme reaches to your left or right and reduce upper body strain.
- Alternate the use of your right and left arm to avoid fatigue. Take frequent, short breaks to help reduce fatigue.
- Bend your knees and keep your back straight while using the mop ringer. This will help keep your spine in the neutral position.
- Avoid lifting heavy mop buckets full of water and pouring them into the sink. Use a hose to drain water or use a floor drain in a custodial closet.

Moving Carts with Cleaning Supplies

- Use carts whenever feasible or carry only small quantities and weights of supplies at one time.
- Keep your most-used items closest to you to help avoid long reaches and subsequent strain on the musculoskeletal system.
- Carts should be pushed and not pulled.
- Use well maintained carts with large, low-rolling, low-resistance wheels for easier maneuvering to help decrease the force needed to move the cart.
- Handles on carts should be at waist height and positioned to allow for neutral postures. Some carts have adjustable handles and may be appropriate when carts are shared between workers.

Trash Removal

- Keep your back straight and bend at the knees, not at the waist, while removing trash bags.
- Making more frequent trips with less weight can help lessen the load on your musculoskeletal system.
- Alternate the use of your right and left hands to remove the trash to help prevent fatigue.
- Ask for assistance or use a mechanical aid such as a dolly or cart to remove a heavy trash bag.
- Keep the load to the safe lifting zone above your knees, but below your shoulders.

Temperature

- Keep loads light when working in extreme cold or heat.
- Wear properly designed clothing to decrease heat absorption.
- Drink lots of fluids when working in high temperature environments.
- Take frequent, short breaks when working in hot environments.